tion of the pupil to light is limited to the eye stimulated, and is not consensual, in amphibia and birds, whether possessed of binocular vision or not. In the rabbit, with scarcely any binocular vision, only the one pupil reacts, and the decussation is almost complete. In casts and in the higher mammals with good binocular vision and semi-decussation of the optic nerves at the chiasma there is consensual pupil reaction. Consensual pupil contraction to light is therefore dependent, not on binocular vision alone, but on semi-decussation of the optic nerves at the chiasma. (6) In the rabbit and the cat both the crossed and the uncrossed fibers are spread equally through all parts of the two tracts, and are not connected into any distinct bundle. (7) Experimental division of the optic tract on one side in cats produced distinct homonymous hemianopia, with the hemianopic pupil reaction, and with considerable diminution of the pupil reaction to direct light in the opposite eye, though its consensual reaction was brisk on exposure of the other eye to light. (8) Injuries, either lateral or dorsal, of the anterior part of the anterior corpus quadrigeminum in cats, if deep enough to wound the tegmental roof surrounding the central gray matter, have produced in four cases descending degeneration in Meynert's fountain decussation, most of the fibers decussating at the level of the third nerves to form a longitudinal tract immediately ventral to the opposite posterior longitudinal bundle of the same side. These are the antero-lateral columnar fibers already traced by Boyce into the lower cervical cord. In no case has he produced any degeneration in Forel's lower decussation. (9) In animals with divergent optic axes and periscopic vision and total decussation of the optic nerves there must exist a posterior total decussation of the pupil reflex fibers connecting the anterior quadrigemina with the third nuclei; while in mammals with good binocular vision and semi-decussation of the optic nerves at the chiasma there must be a semi-decussation of the posterior pupil reflex fibers. Consensual reflex contraction of the pupils to light is effected by means of this posterior semi-decussation between the corpora quadrigemina and the third nuclei, and not by means of any commissural fibers between the sphincter pupillæ centers in the third nuclei. (10) The lesion in typical Argyll-Robertson pupil is probably a sclerosis of these fibers, some of the fibers of Meynert's decussation, and simple reflex iridoplegia is not due to a nuclear lesion, though a nuclear lesion may be superadded in the dilated type of Argyll-Robertson pupil, in which the reaction to convergence and accommodation is also lost. JELLIFFE.

NEUROLOGISCHES CENTRALBLATT

(Vol. 23, 1904, No. 1, February 1.)

1. Two New Skin Reflexes of the Lower Extremity. EMIL REDLICH.
2. Contribution to Myokymia. J. MEINERTZ.
3. Amnesic Aphasia. S. POPOFF.

1. *New Skin Reflexes.*—Redlich describes two new skin reflexes, the first is obtained by stroking in the mid-line the posterior part of thigh, the leg being held free and in support. There is a contraction of the biceps, semi-tendinosus and semi-membranosus muscles, and sometimes the abductors. The second reflexes obtained by stroking the mid-line of the calf, the toes and foot will be as a consequence in plantar flexion. The reflex is normal, and is diminished in such organic diseases as hemiplegia.

2. *Myokymia.*—The author describes a case of general myokymia in a patient who had other symptoms of a neurasthenic condition. The different theories of the disease are discussed, and the author comes to the conclusion that, as in his case, they are mostly functional in origin.

3. *Amnesic Aphasia.*—Popoff details an interesting history of a man, thirty-one years old, with right hemiplegia and aphasia. He could only say yes and no, had paragraphia, but he had retention of spontaneous

speech. He was not mind-deaf. He could construct sentences, but could not say them unless the words were either spoken first, or else they were written, optic and auditory accessories. Autopsy showed a large lesion, which extended much beyond Broca's area, and involved the second frontal convolution and the whole of the insula and the anterior part of the gyrus temporalis. The author comes to the conclusion: (1) That the motor speech center extends beyond Broca's convolution, and that this additional territory contains a helping center whose function is to help motor speech by optic and acoustic aid, (2) that transcortical aphasia is not dependent on a lesion from B in Lichtheim's zone, but in M (Broca's convolution), and (3) as the patient could write to dictation there is probably a center for agraphia, probably in the second frontal covolution.

(Vol. 23, No. 4, February 15.)

1. Concerning the Localization and the Clinical Meaning of the So-called Bone Sensibility, and the Vibration Feeling. L. Minor.
2. The Relation of the Nervous System to Intelligence. P. Kronthal.
3. Is Unverricht's So-called Familiar Myoclonia a Clinical Entity, which is Established in Neurology? H. Lundborg.
4. Hemiplegia Alternans Superior (Disturbance Relating to the Orientation of the Body). R. Kutner.

1. *Continued Article.*

2. *Nervous System and Psyche.*—In a previous article, which was abstracted in the Journal of Nervous and Mental Disease, the views of the author were stated, regarding the components of the nerve cell. In brief, Kronthal believes that the nerve cells are a mass or collection of leucocytes, which have wandered out of the terminal arterioles of the brain, and have not the functions usually ascribed to them. He then discusses as to what constitutes intelligence. In the protozoa, where there is no nervous system, there is intelligence. The author believes that intelligence is the summation of the different reflexes, and that it does not cause the reflexes. The nerve cells, according to him, therefore would have very little to do with intelligence.

3. *Unverricht's Disease.*—The author discusses the familiar myoclonia first described by Unverricht, and quotes Möbius, who believes that this disease is not a distinct clinical entity, but is simply chronic chorea. Lundborg has had considerable experience in this class of cases, and believes that while there is a resemblance between chorea and Unverricht's disease, the latter is of a distinct type.

4. *Hemiplegia Alternans.*—A patient, fifty-eight years old, suddenly has a slight stroke, which in a few days clears up and leaves the following remaining symptoms: paralysis of the right oculomotor nerve and left facial and hypoglossus. The hemiplegia was left sided. The patient, when he walked, had a distinct cerebellar gait. The patient had different delusions of space. Autopsy showed an area of softening in the right cerebral peduncle near the median line, cutting off some of the fibers of the oculomotor nerve, and also affecting the innermost bundle of the peduncle, thus explaining the cerebellar ataxia.

(Vol. 23, 1904, No. 5, March 1.)

1. A Contribution to the Question of Regeneration of Nerve Fibers in the Areas of Multiple Sclerosis. Bartels.
2. A Reflex of the Dorsum of the Foot. K. Mendel.
3. Concerning the Localization and Clinical Significance of the So-called Bone Sensibility in Vibration Feeling. L. Minor.

1. *Regeneration of Nerve Fibers in Multiple Sclerosis.*—The author discusses the question whether the persisting axis cylinder processes found in multiple sclerosis are persisting or regenerative. Strähuber believes that

they are regenerative. On the other hand, however, Bielschowsky and Hoffmann, by the silver impregnation method, could distinctly trace these axis cylinders, and the author believes, as a result of his work, in the same theories.

2. *A Foot Reflex.*—Striking by means of the percussion hammer the lateral part of the foot in its proximal portion, a dorsal flexion of the second to the fifth toe is seen in normal persons. In organic diseases, where the Babinski reflex is obtained by plantar irritation, dorsal percussion will produce a distinct *plantar* flexion of the other toes. This reflex is therefore of value in differentiating organic from functional nervous disease, for in the later dorsal flexion will always be obtained.

3. *Bone Sensibility.*—Minor discusses the work of Egger and others upon bone sensibility, and comes to the following conclusions: (1) To have a correct comparison of vibration sensation to other forms we should have an uninterrupted vibratory apparatus; (2) the integrity of the bones gives no absolute relation to the condition of the vibratory sensation, for it may not be altered in fractures and dislocations; (3) the vibratory sensation is not altered even in a bone fragment which is proximal to a desired process; (4) Periostitis and caries do not alter this sensation; (5) such alterations as ankyloses and thickenings have no effect upon the bone sensibility; (6) parts of the bony frame, as ribs and vertebræ, which have no sensibility, due to a transverse lesion of the spinal cord, may often respond to bone vibrations; (7) Application of the tuning fork upon the uncovered bone, which is decaying, will give vibration sensation; (8) all these facts lead to the conclusion that the study of the bony sensibility is as yet not definite enough to lead to any conclusions.

(Vol. 23, 1904, No. 6, March 16.)

1. Knowledge of the Mikropsia and the Degenerative Conditions of the Central Nervous System. Dr. Pfister.
2. Concerning a Traumatic Paralysis of the Ramus Volaris Profundus in Ulneris. L. Bregman.
3. Concerning the Muscle Swelling in Myotonia. W. V. Bechterew.
4. Concerning the Therapy of Neurasthenia Sexualis. H. Higier.
5. A Contribution to the Primary Tonic Facial Convulsions, with Muscle Waves. V. Vitek.

1. *Mikropsia.*—The author records the history of an interesting patient who was neither epileptic, hysterical or neurasthenic, but had mikropsia. Such cases are not numerous in the literature. It is thought that the cause is probably toxic, but may run in conjunction with the diseases mentioned. It is directly due to a functional disturbance of the muscular apparatus of the eye. Paresis of accommodation may be present.

2. *Injury of Ramus Volaris Profundus.*—There is no previous record of injury of this particular branch of the ulnar nerve, so the case is worthy of record. The symptoms were as follows: In consequence of the paralysis of the interossii, the first phalanges of the fingers could not be flexed, and the last two could not be extended on account of the contraction of the antagonistic muscles. The adduction and spreading out of the fingers were disturbed. All the distances were more marked in the last fingers. The adductor pollicis and the deep branch of the flexor pollicis nerves were paralyzed. Sensation was not disturbed.

3. *Muscle Swelling in Myotonia.*—Bechterew has observed that by striking the muscles in myotonia the swelling will persist longer than usually, sometimes twelve or fourteen seconds, and that the muscles take from three to five seconds to return to normal form. Deep pressure at times will leave a depression which persists for some seconds. The author considers this observation another symptom of myotonia.

4. *Therapeutics of Neurasthenia Sexualis.*—The author has employed

with success muriate of Heroin in doses of 1 ctg., given nightly in the form of powders, suppositories or pills, in neurasthenia sexual conditions. The dose is decreased gradually, and the intervals are lengthened until patient is cured.

5. *Facial Convulsions.*—Vitex reports a case of muscular contractions of the face with a wave-like motion of the muscular fibers. Bernhardt reported the first case, and Unverricht the second. The author assumes that the cause is central (Spiller reported a similar instance before the Philadelphia Neurological Society, so this new case really makes the fourth instead of the third.—*Abst.*). WEISENBURG.

REVUE DE PSYCHIATRIE ET DE PSYCHOLOGIE EXPERIMENTALE

(May, 1904.)

1. The Hypochondriacal Idea. MARCHAUD.
2. The Disorders of the Ocular Reflexes Studied in the Same Patients at the Three Periods of General Paralysis. MARANDON DE MONTYEL.

1. *The Hypochondriac Idea.*—Normally man is not conscious of his several organs. The sensations from them do not cross the threshold of his consciousness. Consciousness of organic sensations results either from an increase in the intensity of the sensations originating from the internal organs, or as a result of directing the mind especially on them. Both states are abnormal, the former giving rise to symptomatic hypochondria, the latter to essential hypochondria. At the base of hypochondriacal ideas there is an emotional state of depression. The hypochondriac is in a continual state of depression. Their sad ideas relate to their personality, to imaginary troubles in the functioning of their organs, are auto-accusatory. Closely allied to the hypochondriacal ideas are the ideas of negation. In the former the patient suffers from imaginary troubles with his organs, in the latter he believes he has no brains, stomach, etc., as the case may be. The two sorts of ideas are often found in the same patient, and the hypochondriacal ideas may give place to the ideas of negation. With reference to their differentiation from ideas of persecution it may be said that the hypochondriacal ideas are auto-accusatory, while the persecutory ideas are allo-accusatory. The persecuted does not accuse his organs of making him suffer; the cause of his suffering is external to his body. The hypochondriacal idea could then be defined as an idea with auto-accusatory tendencies provoked by a sad emotional state, without characters of negation, and relating uniquely to the personality of the patient. The hypochondiacal idea is important for diagnostic purposes. Taken alone it is not sufficient, but it is always accompanied by reasoning, more or less logical, which permits of an appreciation of the intelligence of the patient. As a rule hypochondria develops only in brains that have been poorly developed, and is only rarely due to a peripheral trouble in some organ. There are three classes of hypochondriacs. Those suffering from hypochondriacal preoccupation, who complain in a more or less reasonable way, and for the most part are never confined; those with hypochondriacal delirium, whose ideas are most absurd, such as a belief that the brains are decomposed, etc.; and those with fixed hypochondriacal ideas. These stand in distinction from the first two classes in which the ideas change from day to day.

Here follows a tabulated analysis of 695 cases—360 men and 335 women. Of this number of patients examined, fifty-two preesnted hypochondriacal ideas. Hypochondriacal ideas are shown to be most frequent in conditions of dementia, particularly paralytic dementia, but, on the contrary, are rare in idiocy and imbecility. They are associated very frequently with melancholy ideas, but rarely, as would be expected from the definition, with ideas of grandeur and states of exaltation, only one such case appear-